



AIR CONDITIONING SYSTEM

ABSTRACT OF THE DISCLOSURE

5 **[0037]** The air conditioning system for conditioning of an airflow stream uses a
fluid flow system to control operational modes of heating, cooling, dehumidifying,
freeze protection and defrost. The fluid flow system allows an air conditioning system
to operate using a hot fluid source without the need for a gas or oil direct heat air
stream heat system. The fluid flow system circulates fluid through a reheat coil and a
10 precooling coil or a bypass conduit thereof depending on the operating mode of the
system. Routing of fluid flow is controlled by a hot water control valve and a bypass
valve under control of a control panel and a check valve stabilizing the fluid pressure
minimizing formation of gas bubbles in the fluid which condition may degrade system
performance.

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